Clinical Section

Observations of Medicine in Stanley Municipality

 $\label{eq:By} B\mathbf{y}$ A. F. Menzies, M.D., C.M. (Man.)

In the district between Lake Winnipeg and Lake Manitoba there started twenty years ago what was known as the Winkler Cow Scheme. Cows were brought in from other parts of Manitoba and placed with farmers in that district on a rental basis. The first year the cows did fairly well; the second year a number of the cows aborted; and the third and fourth years the abortion increased and a great many of the cows did not get in calf. The cows gradually lost strength and weight and by the end of the fifth year they were nearly all dead.

About ten years later commercial fertilizer was first used in that area; the results from the standpoint of grain and grass production were exceptionally good, but the really interesting point to us is that the farmers who previously had been unable to successfully raise cattle now found that by using the grain and hay grown on the land where fertilizer had been used, they were able to get their cows in calf. They did not abort, maintained their strength, and in every respect became normal.

This incidentally explained the reason for the failure of the so-called Winkler Cow Scheme.

Whether the minerals put in the soil in the form of a fertilizer—Phosphates—supplied what was lacking in the soil, or acted as a catheletic agent to make available the minerals already there; the result in any case was that the grain and grass contained the minerals in a form that was available to the cattle as it was not before.

Now, in our district—that is in the Municipality of Stanley-previous to 1930 there had not been any great difficulty in the raising of stock other that the manifestations of iodine deficiency; that is hairless pigs, lambs born with goitre, etc., but in the years 1933 and 1934, that is following the two years 1931 and 1932 in which we had the combination of a bad infestation of grasshoppers and dry weather, we, the same as in some other districts in Manitoba, had the same trouble with the cattle as was referred to above in the interlake district. That is, in 1933 a fair percentage of the cows lost their calves through abortion, and in 1934 a large percentage of the farmers were unable to get their cows in calf. Many farmers with ten or twelve cows got only two or three in calf.

The explanation of this by the agricultural experts is that when the grass is very short in the fall part of the root system dies, and the grass plants are left with only surface roots. In the next spring they are then taking their nourish-

ment from the surface soil which has been depleted of minerals, the two chief minerals lacking being calcium and iodine. It is probably because in a dry year there is not sufficient water flowing through the plant to carry into it sufficient of those minerals which are not present in abundance. On the other hand we might note that the experience with the use of fertilizers in the inter-lake district would make one suspect that phosphorous might be the lacking element.

This experience with cattle in the dry years would indicate that the area is very close to the border line in respect to its supply, or available supply, of minerals for proper plant and animal growth.

I have been unable to find out whether a systematic examination of the foetus has ever been made in a large number of abortions due to mineral deficiency in cattle to find out what percentage of the foetuses were defective morphilogically. George Feuffel, of the Dominion Livestock Branch, to whom I wrote, says "It is generally accepted in animal husbandry circles that deficiency states will affect foetal development." Professor J. M. Brown, Manitoba Agricultural College, writes "I think it is quite certain that an overwhelming proportion of deformities are aborts, but I am personally of the opinion that deficiency diets do not produce deformities."

Professor Brown was kind enough to send me a copy of five lectures by W. L. Williams, Professor Emeritus of Veterinary Pathology, Cornell University, and a copy of the report of Hart, Hadley, and Humphrey of the Agriculture Experiment Station, University of Wisconsin, on a feeding experiment conducted by them. They state that it had been shown that the feeding of cows on wheat products only, that is, wheat straw, wheat meal, bran, etc., or the feeding of cereal grain and hay from acid soil, both result in premature calves, some dead at delivery, others feeble and sometimes blind.

Professor W. L. Williams in his lectures makes some rather interesting statements:

First he states that healthy gestation is highly uniform in its duration. When pregnancy is abbreviated or prolonged it is conclusive evidence of foetal disease.

He also states that when a herd of cows are producing a large percentage of bull calves and a large number of twin pregnancies, that this is conclusive evidence of sexual debility in the herd.

The reading of his lectures would lead one to the opinion that the improper care and feeding of heifer calves at the milk feed age results in unhealthy, poorly developed sexual organs, and that when those heifers reach breeding age a large percentage of abortions, bull calves, twins, and abberations in foetal development are the result, also in these heifers dystocia is very common. I would like at this point to remind you that in the review of literature in the Journal of Surgery, Gynæcology and Obstetrics of some three years ago there was a report of routine examination of the foetuses in all cases of spontaneous abortion in a large hospital, and that they reported finding over 60% of the foetuses to be abnormal, and gave it as their opinion that abnormality of the foetus was the most common cause of spontaneous abortion.

Now let us turn to examine for a moment what the condition is in our area as regards children. In what follows I am giving you the experiences in general practice of Dr. C. W. Wiebe, of Winkler, and myself.

In the two worst townships of that area in the past ten years there have been born 10 or 12 children with enlarged thyroids; two of these thyroids were of such large size that the babies choked to death. In the case of the others, by either giving the child potassium iodine, or giving the nursing mother iodine in some form, the thyroid gradually was reduced to normal size. These could have all been prevented by the proper use of iodine during the pregnancy. This is well illustrated in the case of the mother of one of the two children which died on account of the large size of its thyroid. She was given iodine by Dr. Wiebe during the next subsequent pregnancy and gave birth to a normal child, but in the third pregnancy, thinking she was normal, she did not report to her physician during the pregnancy, and again had a child with an enlarged thyroid at birth.

In the village where that woman lives there are two schools. In one the children are 10 years of age and under and in the other they are from 10 years up. In the school with the older children, over 40 in number, 100% of them had enlarged thyroids last fall; and in the school of smaller children all but 6 had enlarged thyroids.

Again in that area of two townships there have been born in the past 15 years six mongolian idiots. I mention them here, as mongolian idiocy is frequently confused with cretinism, and the appearance of that large number in the centre of a bad goitre district, added to the fact that thyroid feeding is recommended in treatment, suggests that their occurrence is more than a coincidence.

There are many other manifestations of abnormal internal secretions in this particular area. We find one pituitary giant, two pituitary dwarfs, five or six suffering from frolech syndrome. Whether it is of any significance or not, yet it is a fact that the cases of pituitary deficiencies are found above the escarpment, whereas the worst goitre area is in the valley below. In the valley also we find acromegaly.

Other conditions in this area that stand out as being too prevalent are rickets, of usually a mild degree, usually combined with anaemia, which is very noticeable in the late winter and spring. We have seen numerous cases of rickets in children breast fed, and I personally have seen

one case of scurvy in the breast fed child nine months old. Before closing the list of conditions that seem to be more prevalent in that area than in the general population I would like to note I have been greatly impressed osteomyelitis. during the past three or four years with the fact that in all cases of osteomyelitis admitted to hospital, the children were badly nourished and enquiries as to their diets elicited the fact that they were all defective as to quality and frequently as to quantity. The last three have been bad cases and have been from families on relief. They were not getting either sufficient or the right kind of food and the home conditions were such that what they were getting was not properly cooked, and in going back in memory over the past 17 years I would be inclined to think that the same conditions prevailed in the majority of cases of osteomyelitis that I have seen in that period.

Now as to the general dietary conditions in the area in question: what are the peculiarities of diet, or what are the dietary deficiencies? this municipality a large percentage of the population was born in Russia. That means that a combination of pork, cabbage, and coffee is quite commonly the diet and in early days rye bread and lard. Dr. Wiebe and I agree, from our knowledge of the district, that probably 50% of the children of the rural population never get whole milk to drink. It has always been true, but since the depression more acutely so, that the children get an insufficient quantity of class "A" proteins in the form of fish, eggs, or fresh meat. Everything saleable is being sold to help pay their debts. As proof of that: in spite of the fact that in 1936 the farmers had less coarse grains and hay to feed their dairy cattle, yet the cream receipts in February, 1937, were 10% greater than in February, 1936. In this district they have usually had sufficient vegetables in the latter part of the summer, but in the winter pickled vegetables, particularly pickled cabbage and melons, are the stable vegetables and in the last six years, on account of grasshoppers and dry weather, 90% of the people have had an insufficient quantity of vegetables and even less than the usual variety. Even potatoes have been very scarce and of poor quality. We are in a district where all the children, during the first two or three years of life, should be getting cod liver oil each winter; yet owing to the lack of knowledge and money there are practically none of them getting it.

Now as regards iodine, iodized salt has been used by a considerable portion of the town population since its introduction, but its use has never become general amongst the rural population, mostly because of the question of price. Iodized salt can be purchased in three forms; the 2 pound carton of iodized table salt, the 50 pound block of iodized rock salt, and coarse stock salt in 100 pound sacks. None of the fine salt which is put up in bags of $2\frac{1}{2}$, 7, 20 and 50 pounds is iodized, and that is the salt that is usually purchased by the farmers.

Now, what have we done or tried to do to remedy or improve the situation? First, we have asked the merchants to assist us in educating the people to use more iodized salt, to sell iodized salt in preference to plain salt wherever possible. Second, through the Department of Education and the Department of Health, we are having the teachers give each child in the rural schools a tablet of sodium iodide once a week. In contrast to the children in the two schools referred to before, where 100% of the children of the older group have enlargement of the thyroid and 80% of the younger group, in the village of Reinland, where they have been getting these tablets for three years, of 57 children in the school only 16 had palpable enlargement of the thyroid, and in no case was the enlargement sufficient to be noticeable at ten feet; that is they could be detected only by palpitation. In the village of Osterwick, where the children have been having the tablets for one year, there were only four children in which the thyroid was of sufficient size to be noticeable at a distance.

We are convinced that a great deal more should be done. First there should be no salt other than iodized salt used in the district for any purpose, that is iodized salt should be used for table use, in the making of butter, used for cattle and all animals. It is not sufficient to be giving iodine to the school children; the children need the iodine from the time of conception until old age. In that way only is it possible to remedy the situation as regards iodine.

We need next to start a campaign for the more extensive use of cod liver oil. We have the majority of younger mothers giving cod liver oil to their babies and in that way the idea will spread, but it is not spreading quickly enough.

I have been wondering whether we shall not find it necessary to feed bone meal to the children; but going back to the experience of the farmers between the lakes with their cattle would suggest that we need more co-operation between the medical profession, veterinary profession, the horticultural and agricultural experts and soil chemists, so that together we might discover what was really necessary. We must start with a proper feeding of the soil. Get the horticultural experts to show the people how to grow the best vegetables and fruits and the best methods of preserving them for winter use; get the agricultural experts to educate them to the point where they will have healthy, well-fed dairy cattle, producing a supply of good milk twelve months of the year; and then it will be up to us to prove to them the necessity, or the advisability, of giving that milk to their children, the feeding of proper vegetables and fruits, and giving them cod liver oil. Then only with the use of iodized salt can they all have healthy children.

I will conclude with a quotation from Gruisinges found in Crotti Book on Thyroid. He, speaking of bad goitre areas, says "Where the endemic is very severe the entire population is affected. Besides the true cretins, the half cretins and goitre

bearers there are innumerable weak-minded, miserable and bad proportioned individuals. There are many deaf mutes, stutterers and stammerers, and strabismus and deafness are frequent. Through the entire native population runs a streak of physical degeneration and mental dullness. Even those individuals who pass for healthy and intelligent are on the whole unlovely, narrowminded and sluggish, and the country teems with mean-spirited Philistines in whom the qualities of heart are insufficient to compensate for the lack of intellect."

The New Synthetic Antispasmodic . . .

TRASENTIN "CIBA"

(Diphenylacetyldiethylaminoethanolesterhydrochloride)

CIBA

SUPPRESSES SPASMS OF THE GASTRO-INTES-TINAL TRACT, GENITO-URINARY SYSTEM AND OTHER SMOOTH MUSCLE ORGANS.

Tablets—bottles of Ampoules—boxes of 20 and 100. 5 and 20. 1 tablet or 1 ampoule contains 0.075 grm.

of the active substance.

CIBA COMPANY LIMITED, Montreal

DOUBLE TEST STANDARDIZED TINCTURE DIGITALIS B. P.

E.B.S.

In addition to using a physiologically standardized Digitalis Leaf for preparing E.B.S. Tincture Digitalis B.P., the finished product, after proper aging, is again physiologically standardized by an independent laboratory. You are therefore assured of definite results.

Supplied in 1-oz. dropper bottles; also 4-oz. — 8-oz. — 16-oz. bottles.

Specify "E.B.S." on Your Prescriptions with Confidence.

The E. B. Shuttleworth Chemical Co.

Limited
MANUFACTURING CHEMISTS
TORONTO CANADA

A Representative Stock of E. B. S. products carried by

CAMPBELL & HYMAN, LTD.

262 Edmonton Street

Winnipeg Manitoba

Syphilis Control . . .

"Canada should be proud of what has been achieved in the field of venereal disease control . . . in Toronto General Hospital in 1920 10.5% of all patients had Syphilis, by 1934 the percentage had been reduced to 1.7 . . . although at the moment general statistics are hard to obtain it is believed that the reduction has been marked in all parts of Canada."

-Health, Dec., 1936, 4:113.

NOVARSAN, the Canadian Neoarsphenamine, should be used as the main weapon of attack, along with METALLIC BISMUTH "Brand Synthetic."

Synthetic Drug Co., Ltd. 243 COLLEGE STREET TORONTO

R

Sulphonamide-P

In Tablet Form

Brands . . .

Burroughs Wellcome British Drug Houses

Procurable at

BRATHWAITES Ltd.

Dispensing Chemists

Portage Ave. at Vaughan

Phone 21 085

Agents for
CONNAUGHT LABORATORIES
in Manitoba

MAIL ORDERS GIVEN PROMPT ATTENTION.
Write or Wire Brathwaite's Limited.

Sulfamidyl ABBOTT

Successful treatment of streptococcic infections—first in mice and later in human beings—with specific chemotherapeutic agents has recently become the subject of much discussion. Although certain aze dye derivatives of para-amino-benzene-sulfonamide were used in the earlier experimental work, it was soon demonstrated that the therapeutic effects resided essentially in the base drug itself. After two years of study by Dr. George W. Raiziss and his collaborators in the dermatological Research division of the Abbott Laboratories, para-amino-benzene-sulfonamide, Abbott is presented to the medical profession as Sulfamidyl.

Indications—Sulfamidyl can be used in erysipelas, puerperal septicemia, and septicemia following abortion; puerperal thrombophlebitis, streptococcal pharyngitis and tonsillitis, and in many other infectious conditions due to streptocuccus hemolyticus.

Sulfamidyl Tablets are supplied in bottles of 25 and 100 5-grs. tablets.

Detailed information will be supplied on request.

ABBOTT LABORATORIES Ltd.

388 ST. PAUL ST. WEST - MONTREAL

Special Articles and Association Notes

The Manitoba Medical Association Review

Formerly the Bulletin of the Manitoba Medical Association
ESTABLISHED 1921

WINNIPEG, JULY, 1937

Published Monthly by the

MANITOBA MEDICAL ASSOCIATION

Editorial Office

101 Medical Arts Building, Winnipeg

Editor

C. W. MacCharles, M.D. (Man.)

Advisory Editor

Ross B. MITCHELL, B.A., M.D., C.M. (MAN.), F.R.C.P. (C.)

Business Manager
J. Gordon Whitley
Annual Subscription - \$2.00

Editorial or other opinion expressed in this Review is not necessarily sanctioned by the Manitoba Medical Association.

[COPYRIGHT]

Remarks on the Address of the President of the United Farm Women of Manitoba

This year an invitation was sent to Mrs. E. L. Johnston, President of The United Farm Women of Manitoba, to address the members of the medical profession. Mrs. Johnston graciously accepted this invitation.

The attention of the profession is directed to the address of Mrs. Johnston printed on another page. This address was delivered during the annual meeting of the Manitoba Medical Association in Winnipeg, May, 1937. Mrs. Johnston discussed the problem of medical services from the point of view of a layman and particularly as it affects the rural population of Manitoba. She pleaded for a more vigorous prosecution of medical research, greater education of the public in health conservation, and discussed many aspects of medical practice.

With the plea for vigorous prosecution of medical research every member of the profession will be in agreement. But in her exposition of this subject the speaker seemed to give expression to a naive presumption common among the laity. Speaking of anterior poliomyelitis, she states, "Even medical men were unable to indicate its

modes of transmission and often in difficulty in making a diagnosis until advanced stages of the disease had been reached. And thus there was brought home to our people by contrast with the understanding which science gives of other diseases, the fact of the need for the unimpeded prosecution of research and investigation." This seems to indicate two presumptions-one, that no real research on the problem has yet been done, and secondly, that all that is required is to provide sufficient funds for investigation and the results will come automatically. It sounds very simple, like a penny in the slot machine put in the penny and the machine delivers the box of matches or the bar of chocolate, as desired. It is true that money may be allocated for the prosecution of one limited aspect of a problem and some results may be anticipated, and yet this usually must be confirmed by other workers. But any large problem is solved only as the result of the associated labors of many research workers and clinicians, and often must await advances in other sciences such as physics and chemistry. The elucidation of a major problem in medicine may extend over the lifetime of more than one generation.

In discussing the relations of the physician to preventive medicine, Mrs. Johnston suggests that the physician should spend more time in health education and preventive medicine. Any further substantial increase in the use of preventive measures would mean that the public would be required to submit to a greater degree of law enforcement with regard to protective procedures than they are evidently prepared to do. It is notorious that at the present time diseases such as diphtheria, which could be prevented, often are not because certain people refuse to submit to inoculation. There are certain sections of the community who object to vaccination or protective inoculation and no government has ever seriously attempted to enforce measures of vaccination or inoculation upon "conscientious objectors."

In discussing maternal care the speaker suggested that "Good maternity care must be made available in every community for every mother whatever her economic status or 'ability to pay' may be." The medical profession has surely done its share in providing its services free to public clinics and to private patients unable to pay for medical services. The solving of purely economic problems is beyond the scope of the activities of the profession of medicine. It is true that we have always had the political prophets crying "lo here and lo there" or more specifically "vote for me and our party will put into operation our patented process for bringing wealth to all and banishing poverty and distress.' Each in turn has had his opportunity to bring about these happy conditions but the poor are still with us, and the medical profession still

has to do what it can by providing free, at its own expense, some form of medical service for these people. If every citizen had sufficient means to provide for payment for complete medical services, including hospitalization, the problem would be solved. The economic system of the nation is not a problem that can be dealt with by the medical profession. All that the profession can do is to deal with conditions as they exist.

One alternative solution of the problem of providing medical services for all classes is referred to in another part of the address under the terms, "State Medicine or Socialized Health Service." Under any such scheme it must be realized that though the individual who is ill might pay less for medical services, the community would pay more as only by the spending of money could the medical services at present available be extended. It would mean, in effect, that the public would spend less on certain other goods and services and more on medical care: there would be fewer radios, motor cars and cosmetics, and more x-ray machines. It might be worth while to mention that the Health Insurance Scheme in Great Britain referred to by Mrs. Johnston is not a complete medical service and still leaves thousands of citizens dependent upon private or public charity for their medical attention.

Again in the discussion of the fees of specialists, no mention is made of the free work done by specialists and of the hundreds of public ward beds set aside in our great hospitals for the specific purpose of treating charity patients. The work in these wards is done by specialists who naturally receive no remuneration for this work. For example, there are 400 beds in the public wards of the Winnipeg General Hospital alone.

Mrs. Johnston discussed what she terms the "closed corporation" in the medical profession and in the next paragraph makes a plea for the maintenance of high standards for those licensed to practice medicine. Unfortunately, "we cannot have our cake and eat it too." If we are to maintain high educational and ethical standards in the profession, it means that certain individuals have to be excluded. The same process of exclusion by examination obtains in all technical occupations. A man who cannot or will not attain to certain specified minimum standards is not licensed to pilot an aeroplane or drive a locomotive.

There are other details in this address which will be challenged by medical practitioners and we may well be surprised at some of the conclusions which the speaker arrived at from rather vague and fragmentary evidence. But the criticisms with regard to details do not detract from the value of the constructive suggestions in Mrs. Johnston's address. Every one at the meeting was very much impressed by the fact that Mrs. Johnston was compelled by a sense of public duty in attempting to give to the medical profession the general opinion of the organization which she represents.

This address should prove of interest to every member of our profession and in itself constitutes a reason for wider education of the public in the principles of medical science and the ethics and traditions of the medical profession.

-C. W. MacC.

Minutes of Executive Meeting

Minutes of a Meeting of the Executive of the Manitoba Medical Association held in the Medical Arts Club Rooms on Monday, June 14th, 1937, at twelve-thirty noon.

Those present were:

Dr. C. W. Burns
Dr. Digby Wheeler
Dr. S. G. Herbert
Dr. E. S. Moorhead
Dr. W. S. Peters
Dr. Geo. Clingan
Dr. Earl Stewart
Dr. F. W. Jackson.

Letter from Dr. C. M. Strong.

The letter from Dr. Strong was brought up for consideration and it was moved by Dr. W. S. Peters, seconded by Dr. Earl Stewart: That Drs. C. W. Burns, Digby Wheeler and S. G. Herbert be a committee to interview Dr. Strong and get all the information in reference to the accusations made in his letter.

—Carried.

Representative to Manitoba Hospital Association.

A letter from the Manitoba Hospital Association re. representative from the Manitoba Medical Association was read by the Secretary.

It was moved by Dr. C. W. Burns, seconded by Dr. W. S. Peters: That Dr. Geo. Clingan, the President, be our representative and be given authority to appoint someone else to represent the Manitoba Medical Association if he himself is not able to attend the Hospital Association meeting in Brandon on June 24th and 25th.

—Carried.

Letter from Editor of Review.

Letter from Editor of *Review* containing correspondence from Dr. Gordon Chown for publication in the *Review* was read by the Secretary.

It was moved by Dr. Digby Wheeler, seconded by Dr. C. W. Burns: That the Secretary be instructed to write to Mrs. McWilliams asking if she would care to send a letter in reply before the matter is given further consideration.

-Carried.

Member of Canadian Medical Association Executive.

Attention was given to the member of the Executive of the Canadian Medical Association, Dr. E. S. Moorhead, as to his attitude towards certain items on the agenda.

It was moved by Dr. Digby Wheeler, seconded by Dr. S. G. Herbert: That the Executive instruct Dr. Moorhead and the Secretary to interview Dr. Routley in reference to publication of an apology re. priority in medical relief plans.

—Carried.

Honorarium to Editor.

The question of an honorarium for editor of the *Review* was brought up and it was moved by Dr. E. S. Moorhead, seconded by Dr. S. G. Herbert: That the Editor of the *Review* be given an honorarium of \$200.00 as in previous years. —Carried.

Public Ward Patients.

Dr. Burns then brought up the question of public ward patients' hospitalization, pointing out that many patients who could afford to pay were coming in as charges against the municipalities and in this way obtaining free medical attention from the profession and in many cases when they return home, reimbursing the municipality. It was suggested to Dr. Burns that the Winnipeg General Hospital be instructed to bring this matter up for consideration at the Manitoba Hospital Association meeting in Brandon. Dr. Clingan, our representative, was asked to take up the matter in discussion. Dr. Burns suggested also that the Minister of Health be informed of the condition as the matter was one of finance also.

There being no further business to discuss, the meeting adjourned.

A Lay View of Medicine

The Address of the President of the United Farm Women of Manitoba

The United Farmers and the United Farm Women of Manitoba welcome very cordially the opportunity of discussing with the medical men of the province some of the problems of the present time relating to the improvement of health conditions. They are very keenly aware of the handicaps which have been put upon progress in this field by the recent period of depression, involving, as it has done, the curtailment of public health services, the reduction of funds available for research and the slowing up of educational projects which otherwise might have been well on their way.

During the past year two occurrences had very wide spread effect in increasing the interest of our people in health problems. The first was the service rendered by a number of outstanding medical men of the province in connection with our Summer Chautauquas. At some twelve or thirteen of these doctors of experience and standing addressed us and created a quite unusual degree of interest in the various problems with which they dealt. They were men of extended experienc as practitioners and knew human nature as well as medicine, and were able to make their contribution of such an intimately practical nature that people could not fail to be interested and impressed. This was similarly apparent when in October Dr. C. R. Rice addressed our provincial convention in Neepawa. His topic was cancerand from the first minute to the last his audience hung upon his words with every manifestation of intense and concentrated interest.

Our leaders were impressed with the fact that gatherings of rural people can be interested and are capable of receiving such information as was presented; and our first conclusion was that we must continue to utilize such channels for continuous and systematic building up of practical health knowledge among our people generally. Its feasibility is demonstrated. Its value is unquestioned. It is up to us to utilize it to the utmost.

The second occurrence was the epidemic of infantile paralysis which swept considerable areas of the province in the latter period of the summer. Perhaps no occurrence since the dark days of the Great War has so impressed the populace with alarm, anxiety and apprehension. It came home to our people with tremendous emphasis that we were confronted with a menace in regard to which we were comparatively helpless. medical men were unable to indicate its modes of transmission and often in difficulty in making diagnosis until advanced stages of the disease had been reached. And thus there was brought home to our people, by contrast with the understanding which science gives of other diseases, the fact of the need for the unimpeded prosecution of research and investigation. In the case of smallpox, in the case of typhoid, in the case of diphtheria, there are means provided by science and readily available, of safe-guarding our people -but in the case of paralysis we appeared to be still very much in the position of a town menaced by bombing planes. It seemed to come unannounced out of the blue-and our anti-aircraft defences were ill prepared to meet the Science will have to work intensively on the problem—and the people and their governments will have to see to it that means for equipping the research laboratories are not lacking. Thus the minds of our populace are becoming increasingly receptive to instruction in regard to health.

The Physician's Relationship to Preventive Measures.

A phase of the general problem which has been receiving considerable attention in the thinking of rural people recently is that of the necessity for increased attention to preventive measures against disease. We have our ordinary sanitation, our local health inspection and some attention being given to instruction in regard to food, clothing and general care of the body. But even the most casual study of the situation is sufficient to show that we are still far from a general health standard which can be regarded as satisfactory. Diseases which all science of today classes as preventible still take their toll widely of our people. Conditions that tend to the propagation of disease are still existent, and each generation as it comes along bears its burden of suffering in consequence.

The ordinary physician of necessity occupies most of his time with the tasks of ministering to the sick, relieving pain, and curing disease; and a very large proportion of the funds of our provincial Health Department is spent in similar labors. This work, while it is vitally necessary and of unquestioned value, is only in a secondary sense progressive and constructive, and we are convinced that there is a much greater work waiting to be undertaken.

The thinking of the United Farm people has been particularly directed to the problem of preventive measures against disease by recent developments. They recognize for example the high degree of success achieved in checking the prevalence of such disease as smallpox, typhoid, and diphtheria, and in contrast with that the situation that still obtains in regard to certain forms of heart trouble, cancer and infantile paralysis. So our people are keenly conscious of the need for active pushing of research especially in regard to diseases, the conditions and nature of which is yet little known. They note with satisfaction the advances being made from time to time—such events as the discovery of insulin, the establishment and endowment of research laboratories, and the intensive work being done in the study of the problems of cancer. They realize that while provincial and national institutions are necessary for special work, it is also to be desired that the working physician be accorded opportunity to relating himself also to research. They recognize that it has not always been the specialist who has made worth while discoveries. The practising physician, fully trained and abreast of the times in his acquaintance with science may be a valued contributor to real progress.

We look forward to the time when conditions will be constituted to give fuller opportunity for the cultivation of this service. From our point of view the ideal would be that a local physician should be placed in a position in which his "job" would be the care of the health of the community, rather than the patching up of broken down constitutions and the applying of remedies to a thousand preventible ailments. Call him-if you like-Curator of Public Health, and set him to the task of safe-guarding his community against the incursions of disease and suffering, and the building up systematically and scientifically of strong bodies for the generation which he serves directly and for coming generations to which also in measure his service will extend. His work will be constructive and progressive. He will set himself not only to improve sanitary and general health conditions but at a very early stage will begin the building up of a health intelligence and a health mentality which as the years pass will develop into a powerful ally and co-operator in his work.

His work will be in an important sense that of an education. People will learn from him acquaintance with the functions of the bodily organs, some understanding of foods and the maintenance of healthful habits of life. They will come to him as "a minister" of health, a wise and experienced friend, a confidant who may be implicitly trusted to give them wholesome and salutary advice. Beginning with comparatively

simple and elementary phases of health knowledge, he will as time passes develop that knowledge and set higher standards of general understanding of health problems. Without in any sense giving them a technical medical education, he will bring them to a high level of understanding of the nature of the physical organism and of the ordinary laws of its health and well-being. Thus they will in their own mentality be safe-guarded against many of the minor menaces of health, and will by their modes of living contribute immensely to the general well-being and to the lightening of the burden of curative activities which may still fall to the lot of their physician.

Mothers and Children.

In connection with preventive medical care there are two phases which have particularly claimed the thought and interest of the United Farm Women—the care of mothers and of children. The securing of the best conditions for these is vital if the after health of each generation is to be well maintained. In the case of mothers it would appear that there is still need for increased emphasis upon prenatal medical attention. recent report indicates that in a special two year analysis made by the Dominion Bureau of Statistics no less than 32 per cent of the maternal deaths occurring in that period were associated with abortions, miscarriages, other forms of interrupted pregnancies, deaths before delivery, etc. In the Manitoba study 34 per cent of the maternal deaths were so classified.

There can be little doubt that this high percentage is largely due to the lack of medical supervision of the case from the early months of pregnancy. The reasons for such lack are not to be attributed to the medical profession. They are largely associated with the fact that women do not seek the advice, direction and assistance which they need during the prenatal period. It is a matter in which the primary necessity at the moment seems to be educational. If once the recognition could be established that during this period careful adjustment of one's habits and activities is vitally necessary and that even the slightest abnormality should be immediately reported to and discussed with one's family physician there is little doubt that the above mentioned percentages could be largely reduced. It may be suggested that patiently continued education along these lines is something in which the Farmers and the Physicians may co-operate. Good maternity care must be made available in every community for every mother whatever her economic status or "ability to pay" may be.

In the matter of the care of children, we are impressed with the urgent need for a periodical check up by a fully equipped medical man on the child's health. Such examinations as are made at the present time reveal so much in the way of incipient trouble—adenoids, tonsil and other throat conditions, abnormalities of sight and hearing, malnutrition, bronchial and lung affections, unhealthful food and exercise usages, etc., that we are convinced that a periodical examination and

registration of conditions would prevent much suffering and immediately contribute to the maintenance of higher standards of health in the community. Here again the primary necessity is undoubtedly in the field of education. Humanity is yet far too much inclined to take health as a matter of course and to fail to realize the profound and practical truth that an ounce of prevention is worth a pound of cure. The United Farmers can be depended upon to co-operate in lifting the common standards of intelligence on such questions and promoting discussion of the various factors involved. Our people appreciate the value of clinics that have been held at various points and would welcome extended cooperation in promoting their use especially in the outlying districts, both for their practical service to needy people and for their demonstration and educational values.

The Physician a Public Servant.

But without proceeding to paint any further picture of the ideal as it might be conceived, we are required to face the very concrete and practical problems of how it can be realized now—or in the near, or more distant, future. It may be admitted that such a situation demands that the physician shall be in the ordinary sense of the term a public servant—that to realize it the municipality, or the province, or the state, must undertake the administrating of caring for the health of the people.

One may remark here that the farmers' organization in Manitoba is not formally committed to the principle of seeking state or even municipal medical service. It may be noted, however, that the corresponding farmers' association in Saskatchewan has formally endorsed the principle of State Medicine or Socialized Health Service and has issued a pamphlet advocating it and outlining for information the system of National Health Insurance operating in Great Britain. It is recognized that systems cannot be the same in all countries and they are working toward a scheme which they hope to be able to recommend for their province. In Manitoba the farmers, while not committed to any scheme, are viewing the project of the Municipal Doctor with increasing favor. We have at the present time in the province six rural areas which have adopted the plan, and are being served by doctors engaged by the municipality. And the number of other districts where the question is being intensively discussed indicates a very definite trend that is already almost province wide.

These municipal arrangements from many angles may seem rather crude and unideal, but even as they are they seem to realize in a measure certain principles which have been gradually coming to general acceptance among us. It provides for example, (a) that the occurrence of illness or disease is provided for in advance, (b) that its burden does not fall solely upon the individual or the family affected but is distributed so as to be borne equitably by all, (c) that some attention

is definitely given to prevention of disease, the physician usually being required to attend to certain inspections, vaccinations, inoculations, etc., (d) that an opportunity if afforded (even if it be but in a very limited way) for the inauguration of the process of education to secure a higher standard of community health intelligence.

It is probably wise that, if such a system is to be general, it should win its acceptance gradually as the people become acquainted with the good it is accomplishing where it is in operation. One thing, however, it seems to us should be safeguarded in the process of extension even from the present time. That is the allocation of districts with due regard to the necessities of adjoining areas so that no community shall be left isolated and deprived of medical service by the fact that certain adjacent areas have found it convenient to segregate their own fields in the engagement of a physician. Indeed it would seem to be wise that something in the nature of a medical survey might be made of the rural part of the province with a view to seeing that the districts defined and constituted may be adjusted with a view to the general need rather than with a view to particular local advantage. If this were done it might assist the working out through coming years of a provincial system with less friction and more genuinely communal interest than if it is left to grow up in a haphazard fashion. It is gratifying to note that at the recent session of the legislature amendments were made to the existing legislation with a view to meeting in part at least this situation. By these the Department of Health will have an opportunity of passing upon the proposals made as to area and other details. Thus we may anticipate that if the system is extended it will be under such direction as will make it ultimately truly provincial.

Problems of Country Practice.

In times like those through which we have been passing, with farmers at their wit's end to know how to maintain their families and carry on from season to season, it is not surprising to find as we do that in certain areas there are complaints in regard to medical service. In referring to these we wish it to be clearly understood that the complaints come from specific areas where economic conditions are difficult, and have reference, not to physicians generally, but to individuals here and there. Here for instance is an area where the complaint is that the doctor, who is not as young as he once was, is inclined to pay very little attention to ordinary ailments -treating them as of no account and only becoming roused to effective action when a case is manifestly serious. From another district comes the story that there is little supervision by the local health officer to checking communicable diseases. It is felt that in some cases epidemics of considerable extent might have been averted by a little care in investigating the first few cases. It is even suggested that the old time principle, "Let a child have all these diseases when young

—he is better for it," seems to be the principle in operation. We recognize, of course, that no up-to-date medical man would take that position —but here and there there seems to be a degree of slackness.

In one instance a country physician diagnosed a case, appendicitis, advising the patient to go to the city for an operation only to be told that he did not suffer from that and sent home again. This cost the patient his life as when an attack came again the city doctor's word was taken and the patient kept at home till it was too late. It does seem that the country doctor does not always get the co-operation that he should from his city co-worker.

The United Farm Women have been asking for legislation providing for a clean bill of health from both man and woman in applying for a marriage certificate. We are of the opinion that if properly safe guarded so that the certificate is not merely a scrap of paper, but a document given only after scientific tests and which may be absolutely relied upon, it might prove a real factor in the elimination of venereal disease. In Great Britain we are informed the syphilis rate has been reduced fifty per cent since 1930 and the yearly occurrence of new cases is now estimated at 0.52 per thousand of the population. In the Scandinavian countries, Norway, Sweden and Denmark, cases of syphilis are as rare since 1920 as cases of typhoid are in this country. And the result has been attained through clinics, widespread education and effective administration. It should be our task to save our sons and daughters by giving them the truth in regard to such matters.

I have not touched on the subject of "imbeciles" and yet there are so many tragedies, so many homes whose home life is ruined because they have one of these misfits of life and for various reasons have it in the home instead of sending it to an institution, perhaps the main reason is that they are unable to pay the \$15.00 per month that is required to be able to have them in the institution. What can be done about this?

The following story came to hand a few weeks ago. A farmer came to town to get a doctor for his wife—a case requiring immediate attention. The doctor refused to go unless the fee was either paid in advance or before he left his patient. This "got" the husband's "goat" and with a few emphatic expressions told him he didn't have the amount, but was willing to pay him as soon as he could get the money—and if he wouldn't go to his wife he would tie him up and take him. The doctor went. The story ends with the remark, "The man had never owed the doctor a previous account." It is evident that in some areas this type of case has occurred somewhat frequently.

Our position is not merely one of criticism of the doctor. We believe the proportion of doctors who would take this attitude is small, and we recognize equally that the doctor is entitled to remuneration for his services. The fact that the

doctor's services are different from those of other professions involving the relief of suffering and distress and even the saving of life, should have a double effect. 1st. It should mean—as we believe it does with most medical men-that the fee is not the sole nor even the primary consideration. 2nd. It should also mean that our social and economic conditions should be put on such a basis that the doctor in every case should be assured of reasonable payment for his services. If at any time the doctors have any suggestion for meeting such situations and providing both that the patient shall be adequately taken care of and that the doctor shall not have to bear the whole burden of providing that care, the United Farmers will be glad to co-operate in working toward a satisfactory solution.

Still another source of complaint is the problem of the fees charged by some medical men for services that are "special"—major operations, X-ray and other tests and, generally, the services of those who are referred to as "specialists." These fees it is said often are exorbitant and bear no relationship to ordinary scales of values in the community. Without quoting figures or specific cases, it seems to be the truth that in many cases the fees charged put these services beyond the reach of the rank and file of our people. Many of our people hesitate to seek the examination and diagnosis they ought to have, not only from dread as to what may be shown to be the matter, but from recognition that they cannot afford to pay the charges. This is surely a situation to be deprecated. Of course the specialist has "specialized," perhaps through years of intensive study, and in some cases his work requires costly instruments and apparatus. But on the other hand if the charges are such that his services are available only by people of wealth and not at all by ordinary mortals-well the situation is far from ideal. We are Utopian enough to feel that sometime and somehow the medical service that is available for one will be made available for all. We have no solution unless it be the multiplication of the specialistbut that there is a problem is surely apparent.

Questions Sometimes Mooted.

Perhaps a word might be said about the feeling that is abroad—not very clearly defined and yet very real that the profession tends to be a kind of "closed corporation." We are told by some that the courses are being made increasingly difficult and that there appears to be a fairly well defined purpose to permit only a regulated number to enter.

So far as this comes from a desire to attain a high standard, or from a desire to exclude merely those who are unfitted for the profession by character or incompetency, we have no quarrel with it. Not only in the medical profession, but in some others we could name, persons have in the past been allowed to enter, who by all right reason should have been barred. But on the other hand both in this province and elsewhere

humankind needs more and not less medical service, and the closed corporation idea, wherever it appears, seems to us to be short-sighted and premature.

This connects in some measure with the problem of what may be termed irregular practitioners. The main features of this problem have been before us for some years. Men and women applying to themselves various class appellationschiropractors, osteopaths, drugless healers, naturopaths, etc.—seek to practise and in considerable numbers are practising as healers. That some patients are restored to health under their treatment cannot, we think, be denied; and taking the province at large there are hundreds who are enthusiastic in their praise of the work done by This, however, should not, and I hope does not, blind us to the dangers of having scores of people with no recognized standards of education, training or experience continuing the practise of the healing art among our people. The present situation is manifestly intolerable.

The common suggestion used to be—why don't they get together and build up a course of training including all that is good in every system? think we recognize today that that is much more difficult than at first appears. When you have to deal with people who flout the germ theory, or who insist that all physical evils come by way of the vertebral column—the getting together becomes almost an impossibility.

Without imagining that we are solving the problem at all, we offer with a degree of hesitancy the following suggestions:-

- (1) The circulation of popular but carefully written information regarding those phases of the philosophy of medicine which are contravened by the thinking and the practice of these cults. Our common people can be shown the reasonableness of the germ theory and the unreasonableness of acquiring typhoid or cancer from a "subluxation," and if that knowledge prevailed generally there would be less worry in regard to the irregulars.
- (2) In particular it is our opinion a pamphlet on the subject of Diagnosis would convey much enlightenment. The first thing a doctor does in undertaking to help a patient is to diagnose. To be equipped for this he must know the body, its organs and their condition in health and in sickness. Many of the irregular practitioners do not diagnose in the ordinary sense at all. Some of them repudiate the idea. More than probably many of them have no training for the making of a complete diagnosis. If this were generally known it would in our opinion, help very materially in avoiding much of the trouble that arises today.
- (3) The employment on the Medical College faculty of a specialist, one who is master of all that can be known and expert in all that can be done toward recovery of health

by "treatment" of vertebrae, joint, bones, and muscles, so that every graduate will be fully equipped with all that these arts can furnish him. With that established there would be little excuse for patronizing the irregular.

To close may we say that it seems to us that increased enlightenment of the populace in the main positions of medical science—enlightenment for which under present conditions we must look mainly to the profession of medicine-will help more than anything else we can think of in securing that all round co-operation, which in the better days that we hope are coming will lead to higher standards of physical well-being, as well as to a position of greater security and satisfaction to those whose lives are being devoted to the art of healing.

Dr. R. L. Hurst, long a familiar figure in the Medical Arts Building, died in the Winnipeg General Hospital on June 3rd. He had suffered from diabetes for years, and death was due to coronary thrombosis. Born at Malverton, Ont., in 1882, he graduated in Medicine from Toronto University, studied abroad and practised in Winnipeg from 1912. A widow and three sons survive him.

LABORATORY POULENC FRERES

OF CANADA LIMITED

The home of:

NOVARSENOBENZOL BILLON

And other highly ethical pharmaceutical specialties.

Rougier Frères 350 Le Moyne St. Montreal

Manitoba Nurses' Central Directory

214 Balmoral St.

Phone 72 151

24 HOUR SERVICE REGISTERED NURSES

NURSING ATTENDANTS

Schedule of rates and hours on request. P. BROWNELL, Reg. N. Registrar.

=PHYSIOTHERAPY=

by J. C. Swann Member of

THE CANADIAN PHYSIOTHERAPY ASSOCIATION (Incorporated by Dominion Charter)

Graduate of: Massage, Swedish Movements, Muscle Re-education and Medical Gymnist, 2 years training in Christie Street Hospital, Toronto, Masseur at Deer Lodge Hospital, Pensions and Health, Winnipeg, for the past 15 years. (Under Medical Supervision or Direction).

Res. Phone Phone 80 760 438 Somerset Bldg. 54 195

after 1 p.m. Winnipeg, Man.

An Excellent, Economical Milk-Modifier For Infant Feeding

These pure corn syrups constitute the ideal carbohydrates for use in infant feeding. They are recommended by many prominent pediatricians, as they are easily assimilable and do not cause any digestive disturbance.

They are low in cost and can be obtained from any grocer.

You can have positive confidence in the purity of these two famous corn syrups, as they are scientifically manufactured under the most hygienic conditions by the oldest manufacturers of corn syrups in Canada.

FOR THE MEDICAL PROFESSION

A convenient pocket calculator, with varied infant feeding formulae employing these two famous corn syrups, and a scientific treatise in book form for infant feeding, also prescription pads, are available on request. Kindly clip the coupon and this useful material will be mailed to you immediately.



EDWARDSBURG CROWN BRAND"CORN SYRUP and LILY WHITE CORN SYRUP

Manufactured by THE CANADA STARCH COMPANY Limited Montreal and Toronto

THE CANADA STARCH CO. Limited Montreal Please send me	Name
FEEDING CALCULATOR.	Address
Book "CORN SYRUPS FOR INFANT FEEDING."	
PRESCRIPTION PADS.	

Reliable Infant Feedings

Are Essential in Hot Weather!

We would suggest that you prescribe

OGILVIE

for all cases of infant feeding and for cases where easily assimilated diets are required. energy for the growing child the most satisfactory method of obtaining the necessary food value is by serving Ogilvie Wheat-Hearts regularly.

Sterilized and packed in airtight containers, Ogilvie Wheat-Hearts are absolutely pure and free from all injurious substance.



A Large Sample Package and Analysis Mailed

The Ogilvie Flour Mills Co. Ltd.

Department of Health and Public Welfare

NEWS ITEMS

An Opportune Reminder

Consideration of information publicized by lay magazines, newspapers and public gatherings in recent years, must make it increasingly evident to all that the awakening of the public conscience regarding matters pertaining to health, constitutes one of the most important advances of the present decade. From whatever angle the situation is viewed, whether it be educational, economic, or purely medical, this is a movement which should be fostered and encouraged. In the past, the medical profession have been leaders in all such trends of public thought, and this is the natural and altogether desirable function of the advanced knowledge which by training is theirs.

But, is the profession alive to the great strides that, in very recent years, have taken place in the public opinion in this respect? It is embarrassing, to say the least, to have pressure brought to bear by individuals or lay organizations, such as school boards, municipal councils, etc., for the more adequate control of communicable disease. Such has actually happened in more that one instance lately, due chiefly to the fact that the health officer in charge had not been made aware of existing conditions. We feel that health officers on the whole are fully alive to their part in the programme of public education and control of preventable illness, and are doing splendid work where they are not so handicapped.

The Provincial Department of Health and Public Welfare is devoting all its efforts, as far as possible, to the assistance of local health officers, but in this, as in other matters, very little of worth can be accomplished without the whole hearted support of the profession as a whole—the private practitioner, be he family physician or specialist, is the rock upon which all advance in public health must be built. Only in one way can we, as a profession, maintain our place of leadership in this direction, and that is by the coordinated efforts of each individual member. Such co-operation, no matter in what line of endeavour, demands small concessions of time and inconvenience, but surely the objectives are ample justification for such expenditure.

In this instance, we are, of course, speaking of the reporting of communicable diseases to the local health officer. The forms supplied by the Department are purposely designed so that they may be completed with a minimum of effort, and while the Public Health Act, Section 14, is specific in its requirements in this direction, we are sure that a reasonable attitude towards the larger picture of public health protection will never make it necessary for measures of enforcement to be taken. Perhaps physicians may not realize that failure to assist the local health officer in this respect may indirectly reflect to their own detriment in public opinion. No doctor is desirous, in view of the enlightened attitude of the people today, of having himself pointed out as displaying any laxness in the protection of his patients or their neighbours from preventable disease, and only by the supported efforts of organized health departments can effective control be achieved.

Another feature of the question, which may have escaped the notice of many physicians, including health officers, is the very definite value, not only to the Department, but to the community as a whole, of the information which is imparted by the report cards. Only by this method can an estimate be made of health conditions in any given area, and the need become evident when further assistance is required.

Very frequently enquiries are received from physicians, and others interested, for information relative to disease incidence—this information may be desired for a great variety of purposes, from the writing of articles for publication, to the establishment of immunization campaigns, but for whatever reason, the degree of accuracy with which this information can be supplied is directly proportional to the completeness with which the physicians send in reports. The Department of Health and Public Welfare, therefore, respectfully suggests that physicians give more attention to this phase of their work than has been the case in some instances in the past, to the end that we may all work together for the common good of humanity, which is, in the last analysis, the prime function of the entire profession.

—M. R. E.

COMMUNICABLE DISEASES REPORTED Urban and Rural - May, 1937.

Influenza: Total 13,993-Winnipeg 2 (Late Reported: January, February and March, Killarney Town 3,700, Kildonan East 2,000, Hamiota Rural 1,100, Hamiota Town 900, Stanley 750, Albert 610, Rhineland 525, Harrison 400, Strathcona 400, Riverside 400, Sifton 359, Siglunes 339, Woodlea 275, Ritchot 265, Whitehead 250, Louise 175, Minto 150, Whitemouth 140, Thompson 102, Ellice 100, Lac du Bonnet 95, Plum Coulee 95, Souris 90, Ste. Rose Rural 85, Dauphin Town 77, Virden Town 75, Wallace 75, The Pas 60, Gretna Village 60, Lawrence 55, Dauphin Rural 54, Turtle Mountain 45, Langford 34, Ethelbert 34, Pipestone 30, Springfield 37, Neepawa 26, Ste. Rose du Lac 25, McCreary 18, Lakeview 17, Edward 13, Oak Lake Town 11, Rockwood 11, North Norfolk 10, Teulon 10, Grey 9, Rivers 8, Winnipegosis 8, Mossey River 7, Grandview Rural 6, Grandview Town 6, St. Paul East 5, Unorganized 4, Rosedale 2, Clanwilliam 1, Elkhorn Village 1, Cypress North 1, Morris Rural 1, Rossburn Rural 1, Swan River Rural 1, St. Andrews 1, St. Boniface 1, St. Laurent 1).

Measles: Total 665—Winnipeg 383, Norfolk North 46, St. Vital 34, Lac du Bonnet 32, Souris 29, St. James 28, Rossburn Rural 21, Springfield 17, Whitehead 15, Gilbert Plains Rural 11, Shell River 7, St. Boniface 4, Roblin Town 3, Rockwood 3, Glenwood 2, Kildonan East 2, Kildonan West 2, Rosser 2, Boissevain 1, Brandon 1, Grandview Town 1, Rossburn Village 1, St. Anne 1, The Pas 1, Unorganized 1, Virden 1 (Late Reported: April, Rockwood 10, Brandon 2, Rosser 2, Springfield 2).

Whooping Cough: Total 191—Winnipeg 158, St. Boniface 14, Kildonan East 6, St. James 5, Brandon 1, Kildonan West 1 (Late Reported: April, Unorganized 5, St. James 1).

Scarlet Fever: Total 89—Winnipeg 60, St. Vital 5, Grandview Town 3, Portage Rural 3, Unorganized 3, Armstrong 2, Kildonan West 2, Thompson 2, Fort Garry 1, Grey 1, Langford 1, Macdonald 1, Montcalm 1, Morden 1, Portage City 1, Roland 1 (Late Reported: April, Transcona 1).

Chickenpox: Total 60—Winnipeg 13, Mossey River 12, Kildonan West 9, Flin Flon 5, Kildonan East 3, Brandon 2, Arthur 1, Brooklands 1, Norfolk North 1, Tuxedo (Late Reported: April, Roblin Rural 8, Flin Flon 2, St. James 2).

Tuberculosis: Total 47—Winnipeg 11, Brandon 3, St. Boniface 3, Grey 2, Riverside 2, Ste. Rose Rural 2, Unorganized 2, Argyle 1, Arthur 1, Cornwallis 1, Cypress North 1, Edward 1, Elton 1, Grandview Rural 1, Kildonan East 1, Kildonan West 1, Mossey River 1, McCreary 1, Pembina 1, Rosedale 1, Silver Creek 1, Stanley 1, St. Anne 1, St. James 1, St. Paul West 1, The Pas 1, Thompson 1, Winchester 1, Winnipegosis 1.

RIVERBEND

SCHOOL FOR GIRLS WINNIPEG

Residential and Day Pupils
Well-Equipped Buildings—Beautiful Grounds
Gymnasium and Out-door Sports
Courses from Kindergarten to
Grade XII inclusive
Home Economics
Special Riverbend Diploma Course.

For Prospectus—Apply to The Principal Miss J. M. Carter, B.A.

The Winnipeg Drug Co., Limited

H. D. CAMPBELL

PRESCRIPTION SPECIALISTS

Agents for NICHOLSON'S VACCINES

407 PORTAGE AVE. (Cor. Kennedy)
Phone 21 621

Delicious to the most jaded palate.

Drewrys Dry Ginger Ale

3 Sizes: 6-oz. — 12-oz. — 28-oz.

Medical Business Bureau

101 Medical Arts Bldg.

Winnipeg

COLLECTION of ACCOUNTS
PUBLIC STENOGRAPHY
AUDITING and BOOKKEEPING

J. L. HEWITT, Manager.

McLEAN PRINTERS

Printers of "The Review"

Kelvin and Hart -:- WINNIPEG

Phone 501 122

Mumps: Total 26—Winnipeg 15, Lawrence 2, Hanover 1, St. Boniface 1 (Late Reported: April, Brooklands 6, Roblin Rural 1).

German Measles: Total 13—Roland 10, St. Boniface 1, St. James 1 (Late Reported: April, Roland 1).

Diphtheria: Total 6—Winnipeg 4, McCreary 1, St. Clements 1.

Erysipelas: Total 6—Winnipeg 3, St. Andrews 1, St. Boniface 1, Whitemouth 1.

Typhoid Fever: Total 2-Ritchot 1, Unorganized 1.

Diphtheria Carriers: Total 2-Winnipeg 2.

Anterior Poliomyelitis: Total 1—(Late Reported: January, St. Boniface 1).

Septic Sore Throat: Total 1-Hanover 1.

Undulant Fever: Total 1-Winnipeg 1.

Venereal Disease Report: Total 110—Gonorrhoea 74, Syphilis 36.

DEATHS FROM ALL CAUSES IN MANITOBA For the Month of April, 1937.

URBAN—Cancer 37, Tuberculosis 10, Pneumonia 9, Influenza 2, Syphilis 2, Typhoid Fever 1, Erysipelas 1, all other causes 141, Stillbirths 11. Total 214.

RURAL—Pneumonia 20, Cancer 19, Influenza 15, Tuberculosis 12, Syphilis 2, Measles 1, Scarlet Fever 1, Whooping Cough 1, Erysipelas 1, all others under 1 year 2, all other causes 149, Stillbirths 18. Total 241.

INDIAN—Tuberculosis 16, Influenza 9, Pneumonia 9, Cancer 1, all other causes 9. Total 44.

Manitoba Sanatorium

TRAVELLING CLINICS

Ste. Anne-

June 22, Tuesday 10 a.m. June 23, Wednesday.

Dominion City-

June 24, Thursday p.m. June 25, Friday (a.m. if possible).

Roblin-

July 5, Monday.
July 6, Tuesday.

July 7, Wednesday a.m.

Russell-

July 7, Wednesday 4 p.m. July 8, Thursday.

Shoal Lake-

July 9, Friday. July 10, Saturday a.m.

Neepawa-

July 19, Monday p.m. July 20, Tuesday.

Dauphin-

July 27, Tuesday. July 28, Wednesday. July 29, Thursday.

Ste. Rose-

July 30, Friday 10 a.m. July 31, Saturday to 2 p.m.

Medical Library University of Manitoba

Current Medical Literature

Post-Graduate Medical Journal-March, 1937.

- Recent Advances in the Treatment of Addison's Disease. By George Graham, M.D., F.R.C.P., Physician, St. Bartholomew's Hospital.
- The Pituitary—Adrenal—Gonadal Complex. By S. Levy Simpson, M.A., M.D. (Camb.), M.R.C.P., Physician to Willesden General Hospital and Assistant Physician to the Princess Louise Kensington Hospital for Children.
- Testes. By A. W. Spence, M.A., M.D. (Cantab.), M.R.C.P., Assistant Physician and Assistant Director of the Medical Unit, St. Bartholomew's Hospital, London.
- Renal Sympathetico-Tonus. By Harold Dodd, M.Ch., F.R.C.S., Surgeon King George Hospital, Ilford, and Royal Hospital, Richmond, etc.

Post-Graduate Medical Journal-April, 1937.

Mock Trial: held in the Barnes Hall, Royal Society of Medicine, Wimpole Street, London, on Thursday, March 11th, 1937. The King vs. Samuel Johnson. Judge Mr. W. H. Cartwright Sharp, K.C. Alcohol and the Motorist.

The Practitioner-April, 1937.

- The Use and Abuse of Drugs and Preparations. Introduction. By Sir Humphrey Rolleston, Bt., G.C.V.O., K.C.B.
- The Use and Abuse of Vitamins. By R. A. Peters, M.C., M.D., F.R.S., Whitley Professor of Biochemistry, University of Oxford.
- The Use and Abuse of Sedatives. By W. Ritchie Russell, M.D., F.R.C.P.E., Assistant Physician, Royal Infirmary, Edinburgh.
- The Use and Abuse of Alcohol. By Clifford Hoyle, M.D., M.R.C.P., Assistant Physician, Brompton Hospital for Consumption and Diseases of the Chest; Examiner in Pharmacology, University of Cambridge and the Royal College of Physicians.
- The Use and Abuse of Serums and Vaccines. By Lionel E. H. Whitby, C.V.O., M.D., F.R.C.P., Assistant Pathologist, The Bland-Sutton Institute of Pathology, Middlesex Hospital.
- The Use and Abuse of External Applications. By Harold Balme, M.D., F.R.C.S., Formerly Professor of Surgery, Cheeloo University, China.
- The Use and Abuse of Drugs in Cardiovascular Conditions. By K. Douglas Wilkinson, M.D., F.R.C.P., Professor of Therapeutics, University of Birmingham; Physician, General Hospital, Birmingham, and the Birmingham and Midland Free Hospital for Sick Children.
- The Use and Abuse of Drugs in Disorders of the Blood. By Charles C. Ungley, M.D., M.R.C.P., Assistant Physician, Royal Victoria Infirmary, Newcastle-upon-Tyne; Leverhulme Research Scholar, Royal College of Physicians of London.
- The Use and Abuse of Drugs in Lung Disease. By James Maxwell, M.D., F.R.C.P., Assistant Physician, St. Bartholomew's Hospital; Physician, Royal Chest Hospital.

- The Use and Abuse of Drugs in Tuberculosis. By Philip Ellman, M.D., M.R.C.P., Physician, the Tuberculosis and Chest Clinic, and Harts Sanatorium, County Borough of East Ham, and St. Stephen's Hospital (Rheumatic Unit), London County Council.
- The Use and Abuse of Drugs in Kidney Disease. By Robert Platt, M.D., F.R.C.P., Physician, Royal Infimary, Sheffield.
- The Use and Abuse of Drugs in Gastro-Intestinal Disorders. By T. L. Hardy, M.D., F.R.C.P., Physician, General Hospital, Birmingham.
- The Use and Abuse of Drugs in Disorders of the Liver. By Charles Newman, M.D., F.R.C.P., Assistant Physician, King's College Hospital, and the Belgrave Hospital for Children.
- The Use and Abuse of Drugs in the Rheumatic Diseases. By G. D. Kersley, M.A., M.D., M.R.C.P., Physician, Royal National Hospital for Rheumatic Diseases, Bath; Assistant Physician, Royal United Hospital, Bath.
- The Use and Abuse of Drugs in the Acute Specific Fevers. By Richard Massingham, M.R.C.S., L.R.C.P., Resident Medical Officer, London Fever Hospital.
- The Use and Abuse of Drugs in Skin Diseases. By W. J. O'Donovan, M.D., Physician, Skin Department, London Hospital.
- The Use and Abuse of Drugs in Midwifery. By Andrew M. Claye, M.D., F.R.C.S., Professor of Obstetrics and Gynecology, University of Leeds.
- The Use and Abuse of Endocrine Preparations. By Leslie Cole, M.D., F.R.C.P., Honorary Physician, Addenbrooke's Hospital, Cambridge.
- The Use and Abuse of Drugs in Psychological Medicine. By Francis Pilkington, M.A., M.B., M.R.C.P. (Lond. and Ireland), and William Sargant, M.A., M.B., M.R.C.P., Medical Officers at the Maudsley Hospital.
- The Use and Abuse of Drugs in Diseases of the Eye. By R. C. Davenport, M.B., F.R.C.S., Surgeon, Royal London Ophthalmic Hospital (Moorfields Eye Hospital).
- The Use and Abuse of Drugs in Diseases of the Ear, Nose and Throat. By F. C. Ormerod, M.D., F.R.C.S., Assistant Surgeon, Ear and Throat Department, Westminster Hospital; Surgeon, Golden Square Throat, Nose and Ear Hospital, and the Ear and Throat Department, Brompton Hospital.
- General Practice. X—Prescribing and Dispensing. By R. H. Micks, M.D., F.R.C.P.I., D.P.H., Professor of Pharmacology, Royal College of Surgeons of Ireland; Physician, Sir Patrick Dun's Hospital, Dublin.

 Lancet—February 13, 1937.
- Anorexia Nervosa. With Special Reference to the Physical Constitution. By J. H. Sheldon, M.D., F.R.C.P., Lond., Honarary Physician, The Royal Hospital, Wolverhampton, and The Guest Hospital, Dudley.
- Intranuclear Inclusions: In the Epithelium of the Human Male Genital Tract. By J. R. Gilmour, M.R.C.P., Lond., Grocers' Research Scholar. From the Bernhard Baron Institute, the London Hospital. With Illustrations on Plate.
- Treatment of Fracture of the Neck of the Femur.
 A New Principle of Wire Introduction for Smith-Peterson Nail. By E. T. Bailey, M.B., Lond., F.R.C.S., Eng., Senior Assistant Medical Officer to St. Leonard's Hospital, London County Council. With Illustrations on Plate.

- The Fate of Thorium Dioxide (Thorotrast) in Cerebral Arteriography. By D. W. C. Northfield, M.S., Lond., F.R.C.S., Eng., and Dorothy S. Russell, M.D., Lond. From the Neurosurgical Department and Bernhard Baron Institute of Pathology, the London Hospital. With Illustrations on Plate.
- Postural Drainage. By H. V. Morlock, M.C., M.D., M.R.C.P., Lond., Physician to the Chest Hospital, Victoria Park, London, The Miller General Hospital, Greenwich, and the Hampstead General Hospital. With Illustrations on Plate.
- Thrombosis of the Popliteal and Femoral Arteries. By A. M. Boyd, M.B., Lond., F.R.C.S., Eng., First Assistant to the Surgical Professorial Unit, St. Bartholomew's Hospital, London. With Illustrations on Plate.

Lancet-February 20, 1937.

- Ritual Purgation in Modern Medicine. By L. J. Witts, M.D., Manch., F.R.C.P., Lond., Professor of Medicine in the University of London and Director of Medical Unit, St. Bartholomew's Hospital.
- Haemorrhagic Disease of the New-Born. A Study of Sixty-one Cases. By Norman B. Capon, M.D., Liverp., F.R.C.P., Lond., Lecturer in Diseases of Children in the University of Liverpool; Hon. Consulting Paediatric Physician, Liverpool Maternity Hospital; Hon. Assistant Physician, Royal Liverpool Children's Hospital.
- Effects of Prolonged Oestrin-Stimulation on the Cervix Uteri. By S. Zuckerman, D.Sc., M.R.-C.S., Eng., Beit Memorial Research Fellow. (From the Department of Human Anatomy, Oxford).
- A Comparison between the Adsorptive Action of Kaolin and Kaolin-Alumina Mixture on Faecal Bacteria. By William Smith, M.D., Camb., Pathologist to the Miller General Hospital, Greenwich.

Lancet-February 27, 1937.

- Tuberculosis in Relation to Life Assurance. By Otto May, M.D., Camb., F.R.C.P., Lond., Principal Medical Officer to the Prudential Assurance Company, London.
- The Treatment of Imperfect Descent of the Testis with Gonadotropic Hormones. By T. W. Mimpriss, M.S., Lond., F.R.C.S., Eng., Chief Assistant in the Surgical Unit, St. Thomas's Hospital, London.
- The Fourth or Apical Electrocardiographic Lead. With Reports
 of Three Cases of Coronary
 Thrombosis with Electrocardiograms. By Edward T. Freeman,
 M.D., B.Sc., F.R.C.P., Irel.,
 Physician to the Mater Misericordiae Hospital, Dublin; Visiting Consulting Physician, Royal
 National Hospital for Consumption, Newcastle.

- The Four-Lead Electrocardiogram in Coronary Disease. By A. Willcox, M.B., Camb., M.R.C.P., Lond., Medical Registrar to the Middlesex Hospital; and J. L. Lovibond, M.B., Camb., M.R.C.P., Lond., Clinical Assistant in the Cardiographic Department, Middlesex Hospital. (From the Cardiographic Department, Middlesex Hospital, London).
- Defensive Role of Bilirubinaemia in Pneumococcal Infection. By Najib-Farah, M.D., Formerly Instructor in the American School of Medicine, Beirut.
- Aneurysm of the Sinus of Valsalva Involving the Coronary Orifice. By Norah H. Schuster, M.B., Vict., Pathologist to the Royal Chest Hospital, London.

British Medical Journal-February 6, 1937.

Cerebral Vascular Accidents. By C. M. Hinds Howell,



This advertisement is not inserted by the Government Liquor Control Commission. The Commission is not responsible for statements made as to quality of products advertised.

- M.D., F.R.C.P., Physician to St. Bartholomew's Hospital and the National Hospital, Queen Square.
- Types of C. Diphtheriae in Capetown. By Joyce Wright, B.M., B.Ch., Department of Bacteriology, University of Capetown.
- Prostatectomy by the Two-Stage Method. A Survey of 158 Cases. By W. K. Irwin, M.D., Aberd., F.R.C.S., Ed., Surgeon to St. Paul's Hospital.
- Exostoses of the External Auditory Meatus. A Technique for Their Surgical Removal. By Arthur Miller, F.R.C.S., Ed., D.L.O., Laryngologist, the French Hospital; Consulting Otolaryngologist, Ealing and Wimbeldon Fever Hospitals; Assistant Aurist, L.C.C.
- Psychological Factors in Rheumatism. A Preliminary Study, Part 2. By James L. Halliday, M.D., D.P.H., Regional Medical Officer, Department of Health for Scotland.
- Temporary Treatment in Mental Hospital Practice. By W. J. Barbour, M.D., D.P.M., Deputy Medical Superintendent, Borough Mental Hospital, Derby.

British Medical Journal-February 13, 1937.

- Progesterone in Pre-Eclamptic Toxaemia. By J. M. Robson, M.D., D.Sc., Lecturer in Pharmacology, University of Edinburgh; and S. J. Paterson, M.A., M.D., F.R.C.S., Ed., Honorary Obstetrician, Elsie Inglis Maternity Hospital, Edinburgh.
- The Relation Between the Hypochromic Anaemias and Iron Deficiency. By J. F. Brock, D.M., M.R.C.P., Assistant Director of Research in Medicine, University of Cambridge.
- Treatment of Gonorrhoea with a Specific Antitoxin. By T. Anwyl-Davies, M.D., B.S., M.R.C.P., Director of the Venereal Diseases Department, and Lecturer at St. Thomas's Hospital.
- Outbreak of Food Poisoning in an Institution. By A. R. Culley, M.D., D.P.H., Medical Officer of Health, County of the Borough of Carmarthen.
- Treatment of Depressed Fractures of the Malar Bone. By A. B. K. Watkins, M.S., Lond., F.R.C.S., Honorary Ear, Nose and Throat Surgeon to the Newcastle General Hospital, N.S.W., and to the Mater Misericordiae Hospital, Waratah, N.S.W.

British Medical Journal-February 20, 1937.

- The Clinical and Biochemical Syndrome in Lymphadenoma and Allied Diseases Involving the Mesenteric Lymph Glands. By N. Hamilton Fairley, M.D., D.Sc., F.R.C.P., Assistant Physician and Director of Pathology, Hospital for Tropical Diseases, London; and F. P. Mackie, M.D., F.R.C.P., F.R.C.S., Pathologist, Hospital for Tropical Diseases. (With Special Plate).
- Treatment of Minor Burns by Amyl Salicylate and Other Salicyl Esters. By R. Leslie Stewart, M.B., F.R.C.S., Ed., Assistant Surgeon, Edinburgh Royal Infirmary. (With Special Plate).
- A Note on Lithopaedion, With Report of a Case. By Paul Cave, M.B., D.M.R.E., Honorary Radiologist, Royal Berkshire Hospital. (With Special Plate).
- An Operation for the Cure of Adult Hypospadias. By Archibald H. McIndoe, M.S., M.Sc., F.R.C.S., F.A.C.S., Assistant Plastic Surgeon, St. Andrew's and St. James Hospitals, Chief Assistant in Plastic Surgery, St. Bartholomew's Hospital, Consulting Plastic Surgeon, North Staffordshire Royal Infirmary. (With Special Plate).
- Large Renal Calculi. By D. J. Harries, M.D., D.Sc., F.R.C.S., Surgeon, Cardiff Royal Infirmary. (With Special Plate).

British Medical Journal-February 27, 1937.

The Nocifensor System of Nerves and its Reactions.

- By Sir Thomas Lewis, M.D., F.R.C.P., F.R.S., Physician to University College Hospital, London. (Illustrated).
- Food and Nutrition. By E. P. Cathcart, C.B.E., M.D., F.R.C.S., Regius Professor of Physiology, University of Glasgow.
- The "Disposition" and the Specific Allergen in Asthma, Hay Fever and Other Allergic Conditions. By E. M. Fraenkel, M.D.
- Post-Hysterectomy and Puerperal Tetanus. A Study of the Bacteriology of Obstetrical and Gynaecological Dressings. By R. J. V. Pulvertaft, M.D., M.R.C.P., Reader in Pathology, University of London.
- Prontosil Album in Puerperal Sepsis. By M. A. Foulis, M.D., Assistant Superintendent and Resident Surgeon; and John B. Barr, M.B., Ch.B., Senior Resident Medical Officer, Robroyston Hospital, Glasgow.
- Coal-Tar Naphtha Distillates for Destruction of Bed-Bugs. By S. A. Ashmore, B.Sc., A.I.C. Government Laboratory; and A. W. McKenny Hughes, D.I.C., F.R.E.S., British Museum (Natural History).

The Canadian Medical Association Journal-May, 1937.

- A Case of Adhesive Constrictive Pericarditis (Pick's Disease). By H. V. Cranfield, N. B. Gwyn, G. C. Anglin and A. C. Norwich, Department of Pensions and National Health, Christie Street Hospital, Toronto.
- The Relationship Between the Rate of Emptying of the Stomach and the Sugar Tolerance. (With Particular Reference to "Lag" Glycosuria). By E. M. Watson, London, Ont.
- Fibrin Calculi. By Theodore J. Curphey, M.D., C.M. (Queen's) and the late Robert B. Anderson, M.D., Brooklyn, N.Y.
- Experimental Production and Prevention of Appendicitis with Histamine. By Hans Selye, Montreal.
- Some Aspects of Modern Cancer Therapy. By Lloyd F. Craver, M.D., New York.
- The Disease Called "Duodenal Ulcer." By Wm. Goldie, M.D., Toronto.
- Thoracoplasty in the Treatment of Pulmonary Tuberculosis. (With Report of 100 Cases). By Geo. F. Skinner, M.D., F.R.C.S. (Edin.), F.R.C.S. (C.); and Lachlan MacPherson, M.D., Saint John Tuberculosis Hospital, Saint John, N.B.
- Functional Disturbances of the Colon: The Irritable (Spastic) Colon. By E. P. Scarlett, M.B., Calgary Associate Clinic, Calgary.
- The Prognostic Value of Routine Blood Pressure Tests in Pulmonary Tuberculosis. By Allan S. Kennedy, M.B., Mountain Sanatorium, Hamilton, Ont.
- Cyclopropane: A Revolutionary Anaesthetic Agent. By Harold R. Griffith, M.D., Montreal.
- Difficulties in the Differentiation Between "Anxiety States" and Hyperthyroidism. By Trevor Owen, M.B. (Tor.), M.R.C.P., F.R.C.P. (C.), Toronto.
- The Freezing of Human Milk as a Means of Preservation. By Newell W. Philpott, M.D.,; and Caroline V. Barrett, R.N., Superintendent, Royal Victoria Montreal Maternity.
- The Mortality from Appendicitis in Alberta. By A. E. Archer, M.B., F.R.C.S. (C.), F.A.C.S.; and M. A. R. Young, M.D., C.M., F.R.C.S. (C.), F.A.C.S., Lamont Public Hospital, Lamont, Alberta.
- Gumma of the Heart. (With Report of a Case). By G. F. Strong and D. S. Munroe, Vancouver.

Executive Officers

President

GEO. CLINGAN, M.D., C.M. (Tor.).

First Vice-President

J. D. ADAMSON, B.A., M.D. (Man.), M.R.C.P. (Edin.), F.R.C.P. (C.).

Second Vice-President

P. H. T. THORLAKSON, M.D., C.M. (Man.), F.R.C.S. (C.).

Honorary Secretary

F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.), Winnipeg.

Honorary Treasurer

C. W. BURNS, M.D., C.M. (Man.), F.R.C.S. (C.), Winnipeg.

Retiring President

F. G. McGUINNESS, M.D., C.M. (Man.), F.R.C.S. (C.), Winnipeg.

Members of the Executive -

Members Elected at Large

S. G. HERBERT, M.D. (Man.), Winnipeg.

E. K. Cunningham, M.D., C.M. (McG.), Carman.

S. BARDAL, M.D., C.M. (Man.), Shoal Lake.

T. W. SHAW, M.D. (Man.), Russell.

(Term Expires 1937)

W. E. R. COAD, M.D., C.M. (Man.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S. (Edin.), Winnipeg.

(Term Expires 1937)

Representatives of College of Physicians and Surgeons of Manitoba

H. O. McDiarmid, M.D., (Man.), F.R.C.S. (C.), Brandon.

W. G. CAMPBELL, M.D., C.M. (McG.), Winnipeg.

DIGBY WHEELER, M.A., M.D., C.M., M.R.C.S. (Eng.), L.R.C.P. (Lon.)

Representative on Canadian Medical Association Executive Committee

E. S. MOORHEAD, B.A. (T.C.D.), M.B., B.Ch. (Dub.), B.A.O., F.R.C.P. (C.), Winnipeg.

Advisory Council

President of Manitoba Medical Association:

GEO. CLINGAN, M.D., C.M. (Tor.) Chairman of Council of College of Physicians and Surgeons:

C. W. Burns, M.D., C.M. (Man.), F.R.C.S. (C.)

Dean of Faculty of Medicine:

A. T. Mathers, M.D., C.M. (Man.), F.R.C.P. (C.)

Deputy Minister of Health and Public Welfare:

F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.) May Be Added:

M.O.H. of District. President of District Society. Others as required.

Representatives of District **Medical Societies**

Central

W. H. CLARK, M.D. (Man.).

Southern

J. F. WOOD, M.D. (Man.).

Brandon and District

W. S. Peters, M.D. (Man.).

North-Western

R. F. YULE, M.D. (Man.)

Winnipeg Medical O. C. Trainor, M.D., C.M. (McG.)

Northern

R. E. Dicks, M.D. (Man.). Border Medical

W. O. HENRY, B.A., M.B. (Tor.)

- Committees -

Committee on Sociology

E. S. MOORHEAD, B.A. (T.C.D.), M.B., B.Ch. (Dub.), B.A.O., F.R.C.P. (C.), Chairman.

F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.), Secretary.

J. A. GUNN, C.B., O.B.E., B.A., M.D., C.M. (Man.), F.R.C.S. (C.).

Ross B. MITCHELL, B.A., M.D., C.M. (Man.), F.R.C.P. (C.).

C. E. CORRIGAN, B.A., M.D. (Man.), F.R.C.S. (Eng.).

CLAUDE MCRAE, M.D. (Man.). C. ATHOL R. GORDON, M.D.

H. MEDOVY, B.A., M.D. (Man.) Editorial Board of C. M. A. Journal

Ross B. MITCHELL, B.A., M.D., C.M. (Man.), F.R.C.P. (C.).

E. S. MOORHEAD, B.A. (T.C.D.), F.R.C.P. (C.).

C. W. MacCharles, M.D. (Man.).

M.B., B.Ch. (Dub.), B.A.O.,

Representatives to C. M. A Council

F. G. McGuinness, M.D., C.M. (Man.), F.R.C.S. (C.), Winnipeg.

F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.).

W. S. Peters, M.D. (Man.).

F. D. McKenty, M.D. (Man.), F.R.C.S. (C.).

G. S. FAHRNI, M.D., Ch.M. (Man.), F.R.C.S. (C.).

P. H. T. THORLAKSON, M.D., C.M. (Man.), F.R.C.S. (C.).

M. R. MACCHARLES, M.D., C.M. (Man.), F.R.C.S. (Edin.), F.R.C.S. (C.).

T. E. HOLLAND, B.A., M.D. (Man.), F.R.C.S. (Edin.).

E. S. Moorhead, B.A. (T.C.D.), M.B., B.Ch. (Dub.), B.A.O., F.R.C.P. (C.).

Legislative Committee

G. S. FAHRNI, M.D., Ch.M. (Man.), F.R.C.S. (C.), Chairman.

Workmen's Compensation Referee Board

W. CHESTNUT, M.D., C.M. (Man.) Chairman.

Two members to be selected from panel for each meeting.

Committee on Maternal Mortality

J. D. McQueen, M.D., C.M. F.R.C.S. (C.), F.A.C.S.

Editorial Committee

C. W. MacCharles, M.D. (Man.) Convener.

Committee on Historical Medicin and Necrology

Ross B. MITCHELL, B.A., M.D. C.M. (Man.), F.R.C.P. (C.) Convener.

Radio Committee

R. W. RICHARDSON, M.D., Ch.M (Man.), Convener.

Auditors

F. G. McGuinness, M.D., C.M (Man.), F.R.C.S. (C.). S. G. Herbert, M.D. (Man.).